

MICROCOPY RESOLUTION TEST CHART NATIONAL BUREAU OF STANDARDS-1963-A



DOCUMENT RESUME

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TITLE A Useful List of Classroom Items That Can Be

Scrounged or Purchased.

INSTITUTION Education Development Center, Inc., Newton, Mass.

SPONS AGENCY Office of Child Development (DHEW), Washington,

D.C.

NOTE 21p.

AVAILABLE FROM Early Childhood Education Study, Education

Development Center, Inc., 55 Chapel Street, Newton,

Mass. 02160 (\$0.50)

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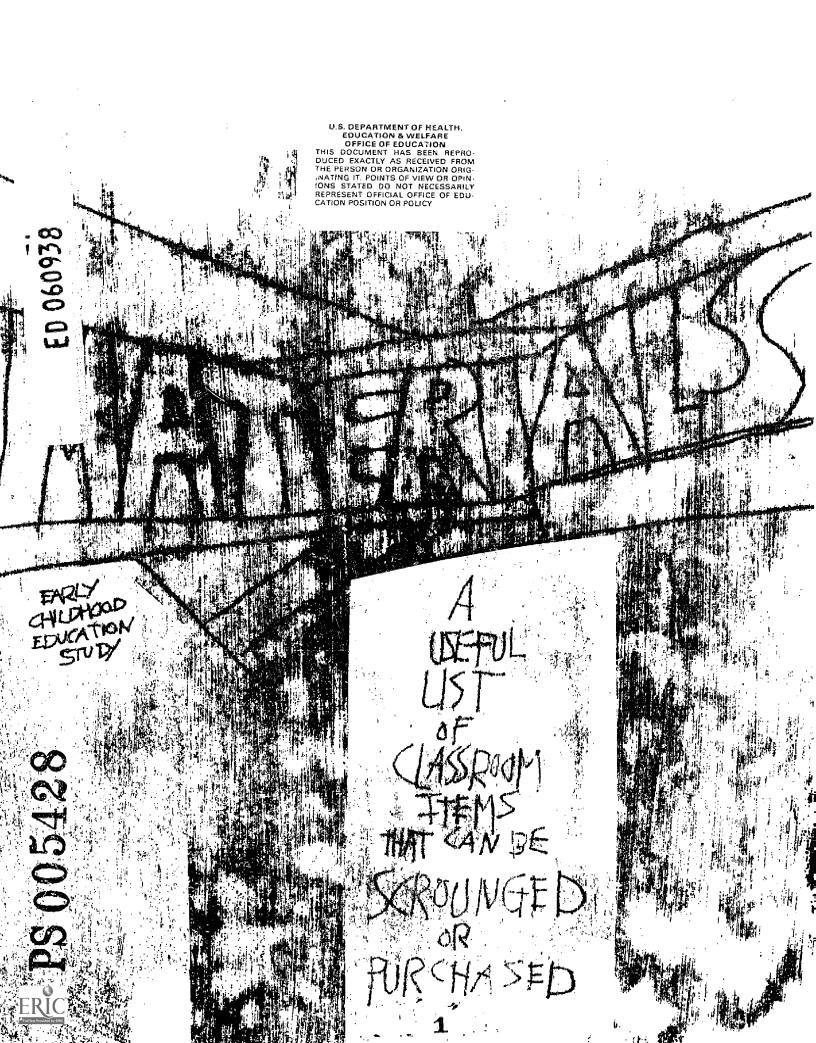
Education; Resource Materials

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ABSTRACT

This Materials List is in three parts: (1) scrounge list, (2) free and inexpensive materials, and (3) supplies and materials to be purchased. This list is designed to help teachers in setting up classrooms for children based on the open approach to education. While many of the items included in Part 3 may impose too great a burden on budgets for Head Start, community action or day care center classrooms, they are included as useful reference materials for all teachers. (Author/CK)





This Materials List is in three parts:

- I. Scrounge List
- II. Free and Inexpensive Materials grouped by classroom activity
- III. Supplies and Materials to be purchased prices and addresses of suppliers are included.

This List is designed to help teachers in setting up classrooms for children based on the open approach to education. While many of the items included in Part III may impose too great a burden on budgets for Head Start, community action or day care center classrooms, we include them here as useful reference materials for all teachers.

The Early Childhood Education Study acknowledges the work of the EDC Follow Through Project and of the National Association of Independent Schools in compiling this list.

We would welcome suggestions and additions to the Scrounge List, and hope you will share your ideas with us.

The Early Childhood Education Study is a project of the Education Development Center, and is supported by a grant from Project Head Start, Office of Child Development, Department of Health, Education and Welfare.

PS 005428

Early Childhood Education Study, EDC, 55 Chapel Street, Newton, Mass. 02160

Cost. \$ 50

PART I. SCROUNGE LIST

This list contains some suggestions for materials available free from local merchants to use in classrooms. They represent only a sample of the many resources you will find in your area. Many of these materials are normally discarded; if you contact local businesses, shops or factories, and make your intentions known, they are quite often willing to save them for you.

Contractors and Building Supply Companies

lumber, pipes and wire, wallpaper, linoleum, tiles, molding wood, sawdust, wood curls.

You can make arrangements to go to a construction site when they are finishing a job; they will let you collect the scrap building materials.

Plastics Company

trimmings, cuttings, tubing, scrap plastic and plexiglass

Electronics Manufacturers

styrofoam packing, printed circut boards, discarded components

Lumber Supply Companies and Furniture Factories

scrap wood, damaged bricks, concrete blocks, doweling, sawdust, wood curls, wood scraps for carving

Hardware Stores

sample hardware books, sample tile charts, linoleum samples

Rug Companies

sample swatches, end pieces from rugs

Supermarkets and Outdoor Markets

cartons, packing materials, fruit crates, large cardboards and materials from displays, discarded cardboard display racks, styrofoam fruit trays

Department Stores

fabric swatches (drapery and upholstery samples), rug swatches, corrugated packing cardboard, sample food cans and boxes, packing boxes from appliances such as washing machines, refrigerators, etc.

Phone Company (call their Public Relations Department)

excess colored wires; telephones (on loan)



Electric Power Company (call their Public Relations Department)

telephone poles, wooden cross arms, steel ground rods, wire, large spools that can be used for tables, assorted packing materials

Garment Factories and Button Manufacturers

a great source for accumulating a wide variety of materials--yarn, buttons, scraps, decorative tape

Camera Manufacturers

cameras (on loan)

Leather Manufacturers and Leather Craft Companies Pocketbook, Belt and Shoe Manufacturers

scrap pieces of leather and lacings

Billboard Companies

pieces of billboard to use as posters, wall coverings

Ice-Cream Stores

3-gallon ice cream containers

Airlines

plastic cups

Container Companies

large cardboard sheets

Architectural Firms, Upholsterers, Textile Companies, Floor Covering Firms, Kitchen Counter and Cabinet Makers, Wallpaper and Paint Stores

color samples; wood, linoleum and tile samples, formica squares, wallpaper books and scraps of all sizes

Bottling Firms

bottle caps, large cardboard tubes

Window, Storm Door and Siding Companies; Soft Drink Manufacturers

aluminum scraps

Cleaners and Tailors

buttons, hangers, scrap material

Restaurant

ice cream containers, corks, boxes and cartons



Large Food, Candy and Soap Manufacturers

sample cans and boxes

Plumbers and Plumbing Supply Companies

wires, pipes, tile scraps, linoleum

Tile and Ceramics Companies

scraps of ceramic and mosaic tile; tile by the pound (inexpensive)

Paper Companies

unusual kinds of paper are often available free in the form of samples, end cuts, or damaged sheets. Paper is delivered to paper companies in large cardboard tubes which are usually discarded. These make good chairs, tables, cubbies, etc. (See <u>Building with Tubes</u>, a publication of the Early Childhood Education Study.)

Metal Spinning Companies

shavings and scrap pieces

Junk Yard and Scrap Metal Yards

unlimited possibilities! Wheels of all shapes and sizes, all kinds of gears and moving parts from clocks, radios, fans, cars, irons, toasters, etc. Handles from doors, cars; knobs; broomsticks; hinges and fittings.

Note: Be on the lookout for packing materials wherever you go. Depending on the nature of the factory or business, they come in an infinite variety of materials, shapes and sizes.



II. FREE AND INEXPENSIVE MATERIALS

Construction, Sewing, and Woodworking

- Boxes of all kinds egg cartons, milk cartons, cookie trays, vegetable 1. cartons and trays, match boxes
- Plastic bottles, boxes and jugs bleach bottles, ice cream cartons, 2. detergent bottles, cheese containers, margarine containers
- 3.
- 4.
- Cardboard tubing from toilet paper, paper towels, wrapping paper Broom handles, spools, bottle caps, lids, pipe cleaners, elastic bands Elmer's glue, paste, Scotch tape, masking tape, paper clips, staples, 5. string, rope, wire, brass paper fasteners
- Wallpaper, swatches of rug and drapery material, tiles, linoleum 6.
- Scrap metal and pipe, wheels 7.
- Gears from clocks, radios, fans, cars, irons, toasters; handles, knobs, 8. hinges and fittings of all kinds
- Scrap wood, fruit crates, large cartons, barrels 9.
- Nuts, bolts, nails, washers, screws 10.
- Cloth various textures and colors: silk, lace, organdy, net, nylon, wool, 11. corduroy, wool, velvet, burlap, felt, cotton, taffeta
- Yarn, ribbon, rick-rack, fringing, decorative tape, lace edging, thread, 12. embroidery floss
- Buttons, beads, sequins, buckles, snaps, zippers 13.
- Needles, pins, knitting needles 14.

Playgrounds |

- Large cartons, fruit crates, barrels 1.
- Concrete blocks, bricks, large stones 2.
- Large spools from telephone wire check phone company 3.
- Ladders, sewage pipes, ropes 4.
- Bicycle tires, automobile tires, saw horses, tree trunks, planks 5.
- Targets painted on boards or on the concrete 6.
- Wooden structure for a clubhouse 7.

House Corner, Dramatic Play, Shops

- Old dresses, paints, shirts, blouses ٦.
- Hats: men's women's, cowboy, baseball, baker, bride's veil, crowns, helmets 2.
- Shoes: ladies' heels, boots, slippers, men's shoes and sandals, etc. З.
- Shawls, coats, capes, scarves 4.
- Beads, earrings, bracelets, pins, belts 5.
- Material to use as saris, turbans, trains, capes 6.
- Fans, glasses, gloves, handbags, wallets, aprons 7.
- White coats for doctors, nurses, bakers, etc. 8.
- Hand mirror, compacts, long mirror, clothes rack, coat hangers 9.
- 10.
- Old televisions, radios, record players, irons, toasters Old dolls, doll's clothes and furniture, stuffed toys 11.
- Telephone perhaps from phone company 12.
- Brooms, dust pans, brushes 13.
- Tub for washing clothes, soap powder 14.
 - Fruit and vegetable crates, saw horses, baskets, grocery carts, shopping bags Play money or units for exchanging - pegs, golf tees, popsicle sticks, etc.

-5-

Sand and Water

- 1. Plastic jugs, bottles, cups, etc. all in varying sizes
- 2. Old teapots, coffee pots, watering cans, garden hoses
- Bottles, jars with lids, tin cans
- 4. Wood, cork, stones, shells, sponges, styrofoam, marbles
- Rubber balls, balloons, bubble pipes
- 6. Hand towels, mops, aprons
- 7. Food coloring, soap, flour, string, wire, rubber bands

Wet Sand

8. Wood, stones, bricks, planks, twigs

9. Shovels, spoons, pails, scoops, rakes

10. Molds, muffin tins, cake tins, paper cups, shells, tin cans, plastic boxes, jars, jugs

Dry Sand

11. Dust pans, brushes, brooms

- 12. Sugar, salt, coffee, tea, spices, seeds
- 13. Bags paper and plastic
- 14. Straws
- 15. Cone-shaped paper cups
- 16. String
- 17. Net material
- 18. Cornstarch

(Materials may be interchanged in 3 categories above)

<u>Balancing</u>

- Plastic containers for storage labeled
- 2. Spoons, scoops, funnels, sieves
- String, wire, paper plates, paper cups, paper paint buckets, paper clips, plasticine, nails, cup hooks
- 4. Milk cartons, baby food jars, juice cans, plastic bags, paper bags
- 5. Materials for weighing and balancing:-spools, bottle caps, clothes, pins, stones, shells, buttons, styrofoam, sponge rubber, corks, blocks, washers, nuts and bolts, rubber balls; rice flour, sugar noodles, coffee, tea, bran, kidney beans, dried peas, nuts, chestnuts, pine cones, sawdust; soap flakes, small cans of food, rolls of life savers, sugar cubes (for making weights), packages made up to exact weights

Math

Materials for counting, sorting, grouping, ordering, and pattern making:-shells, stones, golf tees, marbles, tooth picks, straws, washers, bottle caps,
buttons, beads and lacing, spools, pipe cleaners, lengths of ribbon, colored sticks,
popsicle sticks, cancelled stamps; string, rope, hoops for enclosures

Playing cards, dominoes, checkers, dice
 Old clocks, egg timers, stop watches, wrist watches, metronome, cash register,

scales, adding machines Curtain rod with hooks

5. Calendars, train, bus and plane schedules, maps

Tape measure, yard sticks, rulers, canes, doweling, unmarked wood, lengths of ribbon and string, straws, paper streamers



7

Free and Inexpensive - Art Materials

Collage Tray

- Yarn, thread, ribbon, lace, stones, shells, bottle caps, broom straws, straws, toothpicks, pipe cleaners, twigs
- Materials all varieties
- Scrap paper all varieties
- 4. Wood chips, feathers, sawdust, sand, macaroni, rice, excelsior, packing paper, beads, sequins, buttons, foam rubber, cork, scrap rubber
- 5. Seaweed, leaves, pine needles, seed, wax, chalk, wire, string

Painting

- 6. Muffin tins, empty plastic squeeze bottles, jars with lids, tin cans
- 7. Sheets of plastic, newspaper, apron
- 8. Sponges, string, rope, clothesline and pins for hanging papers
- 9. Straws, sticks, twigs, toothpicks to be used as brushes, paper towels

<u>Graphics</u>

- 10. Tin cans, cardboard tubing, rolling pins, pencils, hair curlers, candles to be used as rollers in printing
- 11. Paper towels folded to make print pads
- 12. Objects for printing:-forks, spoons, potato mashers, buttons, corks, jar lids, blocks, clay, corrugated board, vegetables, rubber bands, paper clips, string, and material

Clay Work

- 13. Plastic bags and covered tins for storage
- 14. Plastic material
- 15. Tools for modeling pencils, feathers, twigs, forks, knives, spoons, rolling pins, pebbles, shells, leaves, toothpicks

Sculpture

- 16. Scrap wood and cardboard
- 17. String, wire, nails
- 18. Toothpicks, pipe cleaners, straws
- 19. Sticks
- 20. Cardboard, tin foil
- 21. Assorted paper
- 22. Elmer's glue



PART III. SUPPLIES TO BE PURCHASED

All prices shown below are 1969 prices and may have already changed. Orders for the following school year should be placed by April 15, and you should be sure to emphasize your requirements for delivery by June 15.

| | ITEM CA | ATALOG REFER | RENCE SUPPLIER | COST |
|--------|--|--------------|----------------------------|----------------|
| Specia | al Equipment (Note: It | ems may be s | shared by several classroo | oms) |
| 1. | Newcomb monophonic portable phonograph | EDT-20 | Newcomb Audio Products | \$ 79.95 |
| 2. | Wollensak Tape Recorder | 1520 | Wollensak 3M Company | 184.95 |
| 3. | Wollensak Listening Center | for 8 hea | adphones " | 14.00 |
| 4. | Wollensak Headphones | | II. | 51.80 |
| 5. | Language Master Unit | | Bell & Howell | 250.0 0 |
| 6. | Headphones | #36407 | И | 28.00/set |
| 7. | Dual Headphone Adaptor | #4 07 20 | u | 3.75 |
| 8. | Blank Card Set 4"x14" | 072481 | и | 9.50/100 |
| 9. | Blank Card Set 3 1/2"x9" | 072475 | 11 | 6.00/100 |
| 10. | Small electric stove for coo | oking | | |
| 11 | Small kiln for nottery | | | |

^{11.} Small kiln for pottery

Tri-Wall Cardboard

Available from Tri-Wall Corporation directly; price does not include freight

| 42" | х | 54" | (20-99 boards) | \$2.41 ea |
|-----|---|-----|----------------|-----------|
| 42" | х | 54" | (100 and over | 1.34 ea |
| 4 ' | Х | 5' | (100 and over) | 1.69 ea |
| 4 ' | х | 6' | (100 and over) | 2.06 ea |
| 4 ' | х | 8' | (100 and over) | 2.86 ea |

In the Greater Boston/New England area, you may pick up small quantities of Tri-Wall at the Workshop for Learning Things, EDC, 55 Chapel Street, Newton. No delivery. Maximum order 30 boards.

| 42" | х | 54" | è | | \$2.10 ea |
|-----|---|-----|---|---|-----------|
| 4 ' | | | | , | 2.95 ea |
| 4' | х | 81 | | | 4.10 ea |

Tri-Wall prices listed above are as of November 1, 1970



ART MATERIALS

A wide variety of <u>papers</u> of all sorts and sizes is essential. A wide variety of sizes in <u>brushes</u> is essential. Especially important are <u>large</u> brushes for painting.

| Papers | |
|--------|--|
|--------|--|

| Paper | <u>\$</u> | | |
|--------------|--|-------------------------------|-------------|
| 1. | White Drawing Paper Vellum 18x24 | Hammett | \$7.80 |
| 2. | Easel Newsprint 18x24 | H | 4.40 |
| 3. | Black Manila Drawing Paper 18x24 | ti | 10.00/ream |
| 4. | Bogus Drawing Paper 18x24 | t) | 4.00 |
| 5. | Easy Glide Finger Paint Paper | H | 1.70 |
| 6. | Ruffmeal Drawing Paper 18x24 | 11 | 4.00 |
| 7. | Crystal Craft Tissue 29 colors 15x20 | п | 1.00 |
| 8. | Construction Paper 9x12, 18x24, 24x3 | 6 packages of assorte | d colors |
| 9. | Project Roll Dispenser 36" #10203 | Hammett | 8.00 |
| 10. | Project Roll 6200 | п | 1.75 |
| <u>Paint</u> | and Brushes | ` | |
| 11. | Dry Powder Paint Basic colors: red, black, yellow, w Others added as budget allows | Hammett hite, blu e | 1.00/1b can |
| | OR Dry Powder Paint in primary colors | Hammett | |
| Brush | <u>es</u> | | |
| 12. 13. | Long Handled Easel Brushes Flat and Round Brushes - 1/2", 3/4", | Hammett 1" | |

B

| 12. | Long Handled Easel Brushes | | | Hammett |
|-----|-----------------------------|-------|------|---------|
| | Long Manarea Lane. | | | |
| | El I - I David Divided 1/2" | 2//!! | 7 11 | |

Chalks and Markers

| 14. | Binney & Smith Colored Chalk | | Hammett | 3.96/144 sticks |
|------|--|----------------|---------|-----------------|
| 15. | Small sticks - assorted colors Sanford Deluxe Magic Markers | 91212 23206 | | 5.38 |
| | Set of 8 colors pie Fine Line Marker Pen | | Hammett | .49 |
| 16. | Red | 23101 | | |
| 17. | Blue | 23102 | | |
| 18. | Green | 23103 | | |
| 19. | Yellow | 23104 | | |
| 20. | Orange | 231 05 | | |
| 21. | Brown | 23106 | | |
| 22. | Purple | 23107 | | • |
| C23. | Black | 231 00 | | |

Art Materials (continued

Clays

24. Plasticine - 10 assorted colors #76500 Hammett

Any low-firing natural clay available locally (must have a kiln available)

Miscellaneous |

| 25. | Scissors - 5" clip point | #21101 | Hammett | .47 |
|-----|--------------------------------|--------|--------------------|-----------|
| 26. | Elmer's Glue - gallon | 21911 | II | 6.00 |
| 27. | 1" Masking Tape | 24423 | II | .76 |
| 28. | 2" Masking Tape | 24424 | н | 1.54 |
| 29. | Scotch Magic Mending Tape 3/4" | 24425 | H | 1.21 |
| 30. | Swingline Stapler | 20903 | п | 6.95 |
| 31. | #24 bare copper wire (1 1b) | 65-835 | Cambosco | 2.50 |
| 32 | Craft-stix (popsicle sticks) | | Constructive Play. | 1.20/1000 |

Plaster of paris - 20 lbs - buy locally

Matt knives

Water based printing inks in assorted colors

Scrap linoleum and scrap pine for block printing

Assortment of gouges and knives for carving blocks--Hammett

Brayers

Glass or masonite to roll ink on



MUS IC

Order all instruments from Magnamusic - Baton, 6394 Delmar Boulevard, St. Louis, Missouri

Note: The following represent a complete ensemble of tuned and untuned percussion which could be shared by several classes. If each classroom bought one item of tuned percussion and one or two of untuned, these could be amalgamated. If only one or two items of tuned percussion are purchased, the starred items would be most useful, as they fall into the range of the child's voice. If three or more are purchased, one from each section would be useful, but of a different timbre; i.e., do not select all metallophones or all xylophones, etc.

Tuned Percussion - all with suitable beaters

| Bass metallophone Bass xylophone | BMd BXd | Carl Orff | \$172.00 156.00 |
|---|------------|-----------|--------------------|
| 3. Alto metallophone | AMd | 11 11 | 57.60 |
| 4. Alto xylophone ** | δXA | 11 | 53.60 |
| 5. Alto glockenspiel ** | ACd | и и | 20.80 |
| 6. Soprano metallophone | SMd | u n | 42-40 |
| 7. Soprano xylephone | SXd/a | 11 11 | 46.80 |
| 8. Soprano glockenspiel | SGd/D | 11 11 | 24,60 |

Other Percussion Instruments (as many as possible to be purchased)

| | Standing drums with soft beat | ers | | |
|-----|-------------------------------|--------------|--------|-----|
| 9. | 12" | P30 | 29.60 | |
| 10. | 14" | P35 | 34.40 | |
| 11. | 16" | P40 | 39.20 | |
| 12. | 2 Tambourines 10" | RST25 | .11.90 | ea. |
| 13. | 2 Tambours 12" | RST30 | 13.60 | ea. |
| 14. | 2 Pairs Cymbals 10" | C25 | 15.20 | ea. |
| 15. | 1 Share Drum and Sticks | KT30K | 38.00 | |
| 16. | 4 Triangles (largest size) | T30 | 5.80 | ea. |
| 17. | 4 Pairs Castanets with handle | <u>1</u> KS1 | 4.70 | ea. |
| | Wind Instruments | | | |



18. 6 plastic soprano Recorders

3.25 ea.

WOODWORKING

1. Woodwork Bench H306DC Hammett \$ 46.50

Real Tools, Not Toys - purchase from local supplier

- 2. 4 small Claw Hammers
- 3. 1 Crosscut Saw
- 4. 2 Keyhole Saws
- 5. 2 Small Screw Drivers
- 6. Screw Driver Electrical
- 7. 2 Pliers
- 8. 2 Coping Saws
- 9. Wire
- 10. Wire Cutter
- 11. Sand Paper
- 12. Doweling varying widths

(wooden squares and circles for nuts)
(threading kit)

- 13. Paint
- 14. Turpentine
- 15. Shellac
- 16. Brushes
- 17. Wood
- 18. Pegboard
- 19. Springs
- 20. Hinges, knobs, nails, screws, nuts, bolts
- 21. Large metal pulleys, various sizes
- 22. Rope, nylon cording

MATHEMATICS

Construction

| 1. | Skribble stix | 11600 | Milton Bradley | \$ 5.00 | |
|----|---------------|--------------|---------------------|---------|----|
| 2. | X blocks | ESA 7363/001 | SEE | 25.00 | ** |
| _ | H blocks | ESA 7362/005 | 11 | 21.60 | *1 |
| | Lock-a-blocks | Galt: N-1305 | 11 | 2.50 | *1 |
| | Cu-bricks | 814-115 | Childcraft | 3.95 | |
| | Prism blocks | 8M-325 | 11 | 8.00 | |
| | System One | 8M-327 | II . | 10.00 | |
| | Flexagons | DQ116 | Creative Playthings | 5.95 | |
| | Geo. strips | INV 141 | SEE | 8.00 | |

Mosaics

| 10. Pattern blocks | PBCK01 | SEE | 9.00 |
|-----------------------------------|---------|---------------------|------|
| 11. Geometric Rubber Mosaic Tiles | DJ115 | Creative Playthings | 5.00 |
| 12. Basic shape sets | INV 140 | SEE | 5.00 |
| 13. Polymosaic | 77067 | Hammett | 2.59 |

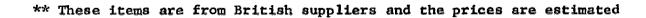
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MATHEMATICS (Continued)

<u>Mosaics</u>

| | Plastic Mosaic Shapes | ESA007 | SEE | \$ 7.75 |
|-----|--|---------------|----------------------|-------------|
| | Mosaic shapes 9" set | ESA7557/027 | | 1.50 ** |
| | Scope | | Economy 5 & 10 | 5.00 |
| | Halsam Play tiles | 73.500 | Hammett | 2.50 |
| _ | Ornabo | ESA008 | SEE | 15.00 |
| 19. | Playskool Color Cubes | 302 | Constructive Playthi | ngs 2.00 |
| | Structured Materials | | | |
| 20. | Poleidoblocks Set G | ESA021 | SEE | 20.00 |
| 21. | Geo-blocks | 17523 | McGraw-Hill | 29.50 |
| 22. | Grouping set | T11 0 | Taskmaster | 15.00 ** |
| 23. | Unifix cubes | TN42-23 | Constructive Playthi | ngs 2.45 |
| | | | _ | Box of 50 |
| 24. | Unifix 100 track | TN42-31 | 11 11 | 4.50 |
| 25. | Unifix 100 trays | TN42-30 | 11 11 | 1.50 |
| 26. | 11 11 11 | TN42-16 | 11 | 2.15 |
| 27. | Unifix plastic markers | TN42-6 | 11 11 | 2,95 |
| 28. | Cuisenaire rods | CG-1E | Cuisenaire Company | 6.95 |
| 29. | Cubical counting cubes | 8039 | Hammett | 4.00/100 |
| 30. | Attribute blocks | AGCKOO | SEE | 8.60 |
| 31. | Mirror cards | 18418 | McGraw-Hill | 10.80 |
| 32. | Dienes Logical blocks | Z80007 | Herder & Herder | 19.50 |
| | Rubber Pegboards | DN113 | Creative Playthings | .65 |
| | Pegs | DN115 | " | .80/100 |
| | Rubber bands | BANDO1 | SEE | .30 |
| _ | Multi-mat Square sum | | 11 | 7.25 |
| | Multi-mat All squares | | ** | 7.25 |
| | Shapes Board | T107/3 | Taskmaster | 3.00 ** |
| | Circle Board | T105/2 | 11 | 2.40 ** |
| , | 211010 24010 | | | 201,0 |
| | Counting, Sorting, Matching, Grouping, Sharing, etc. | Ordering, | | |
| 40. | Miniature toys by 1b. | DB~103 | Creative Playthings | 5.95 |
| | Miniature cars | DD - 103 | Buy Locally | 3.,, |
| | Miniature animals | | Buy locally | |
| | Golf tees | | Buy locally | |
| | | 470 | Milton Bradley | 1.75 |
| | Beads | | Milcon bradley | .70 doz. |
| | Bead Laces | 471 | TT | |
| | Counting sticks | 64041 | Hammett | 1.30 |
| 4/. | Colored Plastic Washers | PRMO06 | SEE | 20.00 |
| | | | | ln 6 colors |
| | a a | DD1/000 | 3.50 gross : | |
| | Counting Chips | PRM008 | 1.75/200 in | |
| 49. | Assorted Porcelain Tiles | 77122 | Hammett | 1.50 |





MATHEMATICS (Continued)

Puzzles and games locally available, chess, checkers, etc.

| 50. | Tangrams Pieces | (ESS) 17 | 446 McG | raw-Hill | \$ 2.40 |
|-----|-----------------|------------------|-----------|----------|---------|
| 51. | Tangrams Cards | (ESS) 17 | '445 | ** | 4.20 |
| | | ms (fit ESS card | s) SEE004 | SEE | 4.00 |
| | | ms (different pi | | ti . | 4,00 |

CONSTRUCTION

Note: We suggest

(a) that some items be ordered from each of the groups

(b) that any central store set up should carry examples of all items listed.

| Junior Engineer | ESA 7453/029 | SEE | 18.00 ** |
|--|----------------------------------|---|--------------------------------------|
| Gient Engineer Construction | Kit ESA 9884/408 | ". | 38.00 ** |
| Mechanical Building Set | | EDC Workshop Store | 97.93 |
| Fischer Technik 200 | DT751 | Crestive Playthings | 14.95 |
| Play panels Clink-a-Links Playplax rings and squares | 8M383 8M324 | Childeraft "Economy 5 & 10 | 4.95 4.00 9.95 |
| Octons | GALT 1540 | SEE | 4.50 ** |
| Hex-upon Rising Towers Ji-gan-tiks Top towers Join-Ems | DR255 8M310 8M399 8M116 | Economy 5 & 10 Creative Playthings Childcraft | 7.95 3.00 2.98 3.00 3.95 |
| Snapsticks | 8M284 | '' | 4.95 |
| Connector | 8M1.18 | '' | 12.00 |
| Big Boy Tinkertoy | 84465 | Hammett | 5.50 |
| Rig-a-Jig | DT662 | Creative Playthings | 4.00 |
| Constructo-straws | 60563 | Hammett | 2.00 |
| Geo-D-stix | 8M332 | Childcraft | 4.95 |
| Lego #74 | DT666 | Creative Playthings | 10.95 |
| Minibrix | GALT N-1060 | SEE | 7.60 ** |

** These items are from British suppliers and the prices are estimated



SCIENCE

| Electricity | • | | |
|---|-----------------|-------------------|--------------------|
| Pkg. of 48 Batteries | BATT48 | SEE | \$ 8.60 17.00/2 |
| 100' #20 bare copper wire | BBCK01 | , nt | 1.25 |
| GE #48 bulbs | BBCK08 | 11 | 4.50/25 |
| 04 "40 04200 | 2201100 | | 14.50/100 |
| Bub holders | BBCK10 | 18 | 2.25/10 |
| | | | 13.00/60 |
| Large rubber bands (battery h | olders) BBCK14 | ** | .65/40 |
| Wire Cutters | BBCK16 | f f | 1.25 |
| | | | 1.10 ea/7 or more |
| Pkg. of 8 spools assorted wir | es BB0807 | 19 | 11.75 |
| Electrostatics materials | 64~208 | Cambosco | 3 . 75 |
| Warrantin de du di anno | | wil manuary | |
| Magnetism (* indicates a part | icularly powerr | ul magnet) | |
| Magnastiks | 8M289 | Childcraft | 7.95 |
| Magnastiks | KR613 | Creative Playthin | |
| Magnetic Needle | Z-4100 | LaPine | 1.90 |
| Magnetic Compass | 59-229 | Cambosco | •53 |
| Iron Filings | 59 - 178 | H | .63/1ъ |
| Encased Iron Filings | DS~741 | Creative Playthin | gs .79 |
| Small Steel Balls | 59-173 | Cambosco | .38/100 |
| Magnetic Balls | 60,508 | Edmund | 1.00 |
| Flexible Magnetic Strip | 60,092 | | 1.25 |
| Flexible Magnetic Cord | 40,875 | | 2.50/10' |
| Rubberized rect. magnets w/ce | nter hole BBCK1 | 8 SEE | .10 ea |
| | | | 7.00/100 |
| Assorted Rubber Magnets | 1804 | Welch | 2.50 |
| Ceramic ring magnets (12) | 8P307 | Childeraft | 1.95 |
| * 1½ lb. Horseshoe magnet | 60,215 | Edmund | 5.75 5.00 |
| * Ring magnet (5'dia.) | 60,578 | | 5.00 .35 |
| Lodestone | Z~3950 | LaPine " | 1.80 |
| Alnico bar magnet | Z-4260 | | 1.00 |
| Alnico horseshoe magnet 3/4' ac | " " 219- | ILA | 1.50 |
| * " " 1-5/8 " | " " 219- | TTD | 2.40 |
| * Cylindrical magnets 6 x 50 mm | んエノー | 110 | 1,40/pr |
| " 10 x 127 m | m 60 131 | Edmund | 3.00/pr |
| " 21 x 16 mm | | II II | 2.00/10 |
| * Disc magnets (polarized along | | ty | 2.00/pr |
| " | ") | | |
| (with center ho | le) 60,433 | • | 1,60/pr |
| Small ceramic disc magnets (2 | " dia.) 40,820 | 10 | 1.00/25 |
| Ceramic rect. magnets w/cente | | 11 | 1.00/10 |
| Ceramic ring magnets | 40,869 | ** | 1.00/4 |
| * Ring gap magnets | 40,964 | ** | 2.35/4 |
| * U magnets (1-11/16" across po | | tt | 2.15/4 |
| * U magnets (1- 1/16" " | ") 40,909 | 11 | 2.00/10 |
| | | | |



SCHEACE (Continued)

Magnetism (Continued)

| 10 | Alnico U Magnet (1-5/8" across Rectangular magnets (1-1/8 x 3/ Ceramic rect. magnets (1-7/8 x 7/ | /4 × 注"] |)40,906 | Edmund | nund | \$ 3.45 2.10/8 1.40/pr | |
|----|--|----------------|-----------|---------------|----------------|------------------------------|---|
| | <u>Optics</u> | | | | | · · | |
| | openes | | | | | | |
| | Polarizing sheets 6" x 6" | 60,637 | | Edmund | | 2.50/4 | |
| | Mounted Polarizing Filters | | | 11 | | | |
| | 4" x 4" | 40,991 | | " | | 4.00 | |
| | Lenticular screens kit | 60,589 | | ** | | 2.00 | |
| | Moire Patterns Color Kit-Series | | 60,530 | £7 | | 12.50 8.00 | |
| | Color Filters 5" x 8"(44 diff. | rirs) | 60,403 | | - 2 440- 101 | | |
| | Colored cellophane rolls | | nder Art | | p.2, item 10) | , 13.75 | |
| | Telescope & Mount | 60,735 | TARISES | Edmund SEE | | 1.00 | |
| | Color Paddles (red, blue, yello | | INV353 | | Playthings | 5,95 | |
| | Magic Reflector (kaleidoscope) | 3742 | | Welch | riayenings | 2.25 | |
| | Hand Stroboscope | DS 050 | | | Playthings | 5.95 | |
| | Big i Little i | DS170 | | II II | 11 | 3.50 | |
| | Small Stand Magnifier Giant Magnifier on Stand | DS374 | | ** | 11 | 9.95 | |
| | Small Cylindrical Magnifier | 79-35C | | Cambosco | | 1.95 | |
| | Reading glass | 40,027 | | Edmund | | 2.25 | |
| | " " plastic lens | 60,635 | | 11 | | 1,00 | |
| | 1" Hand Lenses | MGBK03 | | SEE | | 1.00/10 | |
| | Microscope | SEESCO | | 11 | | 3.25 | |
| | " (same)with illuminate | | | 11 | | 4.25 | |
| | | 73-301 | | Cambosco | | 3.75 | |
| | Mirror Cloth (specify #1 Clear desired | Mirror | ; also s: | ize of mi | rrors & size o | of cloth | |
| | ½" x ½" mirrors | -, | | National | Products | 2.30/sq f | Ŀ |
| | ½" x 1" mirrors | | | 11 | 11 | 2.00/sq i | t |
| | 1" x 1" mirrors | | | 11 | 11 | 2.00/sq f | t |
| | Plastic Mirror (specify 1/8" th | nick and | i. | | | | |
| | desired dimensi | Lons) | | Parallel | Mfg. Corp. | 4.00/sq f | t |
| | Metal Mirror 4" x 6" See en | | tics sec | etion) | | | |
| | Plastic Mirrors 2½ x 3½ | MIR | | 11 | | 1.25/3 | |
| | | | | | | 10 or more | |
| | Round Flexible Mirror | DJ319 | | | Playthings | 3.75 | |
| | Paddle Mirrors and Standing Min | | DS053 | " | ** | 11.50 | |
| | One-way glass mirror 5 x 15 cm. | .57-226 | | Cambosco | | 1.20 | |
| | Concave-Convex metal mirror (75 | 5 mm dia | a.) Z-45 | 50 LaPin | е | 1.40 | |
| | | $" \times 4"$ | Z-45: | 55 " | | 1.55 | |
| | Concave-Convex Cylindrical meta | al mirro | or | | | | |
| | (1) | " x 6") | 57-244 | | sco | 1.00 | |
| | Perspex (plastic) Prisms (set | of 7) | INV68 | | | 17. 75 | |
| | Refraction plate | Z-3100 | | LaPine | | 1.25 | |
| | Flat equilateral prism | Z-5 060 | | 11 | | 1.40 | |



SCIENCE (Gontinued)

| | Optics (| (continued) | |
|--|----------|-------------|--|
|--|----------|-------------|--|

| Flat right angle prism | Z-5070 | LaPine | \$ 2.09 |
|--------------------------------|--------|------------|----------------------------|
| Right angle prism (75 x 25 mm) | Z-5080 | 11 | 2.25 |
| Equilateral prism (75 x 25 mm) | | 11 | 1.75 |
| " (153 x 30 mm) | | Creative P | Playthings 2.00 |
| Refraction cube | 57-315 | Cambosco | 3.85 |
| Amici Roof Prism | 3002 | Edmund | 1.50 |
| Penta Prism | 40,622 | ** | 6.50 |
| Metal Mirror 4" x 6" | PBCK02 | SEE | .80 |
| | | 3 | 1.50 pr; .70 ea/10 or more |
| Magnifier 4X | MAGO4X | 11 | 3.25 |
| Magnifier 8X | MAGO8X | 17 | 3.25 |
| | | | |
| | | | |

Mechanics/Dynamics

| Swinger (5 suspended steel | balls) SEE003 | SEE | 8.00 |
|----------------------------|-----------------|----------|------------|
| Assorted springs | (local hardware | store) | |
| Spiral Wave Motion Spring | 55-11ช | Cambosco | 4.95 |
| Gyroscope | GYR001 | SEE | .75 |
| Turntable bearing mount | 40,602 | Edmund | 1.50 |
| Single Pulley | Z-5200 | LaPine | .90 |
| Pouble " | Z-5210 | 9.8 | 1,20 |
| Triple " | 2-5220 | 11 | 1.55 |
| Quadruple " | Z-5230 | H | 1.85 |
| Double Tandem Pulley | 2~5240 | 11 | 2.10 |
| Triple " " | 2-5250 | H | 2.70 |
| Linen Pulley Cord | 43-472 | Cambosco | .85/25yds |
| Styrofoam Balls | | • | |
| 3/4" dia. | 39-110-1 | Cambosco | 1.80/12doz |
| 1" " | 39~110-2 | 11 | 2.88/12dos |
| 2" " | 39-110-4 | 11 | 2.76/4doz |
| 311 11 | 39-110-6 | H | 4.50/3doz |

Sand and Water Play

| Sand and Water Play Table Aluminum Liquid Measures Set | A64 DJ070 | Community Playthings Creative Playthings | 9.50 |
|---|---------------|---|-----------------|
| Medicine Droppers | KPST12 | SEE | .50 doz |
| Plastic Measuring Cups 1 & 2 | cup Buy local | ly | |
| Food Coloring | 11 11 | | |
| Polyethylene Sheeting (6' wide | e) | Roy Edwards, Inc. | 10/80/100' roll |
| Syringe 20 cc | GAOT11 | SEE | .35 |
| Syringe 30 cc | GAST10 | 11 | .40 |
| Syringe 50 cc | GAOTO0 | 11 | .60 |
| Alumninum Sifters and Cans | DP233 | Creative Playthings | 4 .7 5 |
| Paddle Boat | DR035 | 11 11 | 3.00 |
| Sand Machine | DB632 | f1 11 | 8.00 |
| Plastic funnel 35 mm | 25-465-1 | Cambosco | .31 |



SCIENCE (Continued

Sand and Water Play (Continued)

| | 25-270-2 " dia) GAST03 | Cambosco "" "" "" "SEE | \$.36 .58 .91 1.90 1.95 2.00 .35 .30 ea/10 or more |
|--|---------------------------|------------------------|--|
| Plastic tubes (6' long x 5/8" | | if | .25 |
| Caps for above (min. order 10) | GASTO6 | ţ1 | .04 ea .03 ea/25 or more |
| Clear Plastic Tubing (specify | え" I.D.) 2080 | Greene Rubber | Go14 ft (min.order 50 ft) |
| Plastic bottle w/hole in botto Set of 5 caps with different | m KPSOO7 | SEE | .35 |
| size holes for above | KPS008 | 11 | .50/set |
| Assorted taper corks | 23-15-3 | Cambosco | 5.00/100 |
| Miscellaneous | | | |
| Thermometer Fulham Balance | SEETOO DA383 | ara Crestive Playth | .60 nings 12.50 |
| Equal Arm Balance | 21303 | | |
| (from ESS Kitchen Physics) | KP0604 | SEM | 1.85 |

DRAMATIC PLAY

Good suggestions for classrooms - probably not necessary for teachers' workshop. Collect wooden boxes and crates out of which to make housekeeping corner furniture.

A set of Dishes

| 1. | Buy locally: cups & saucers - set of 6: plates - set of 6: silver | ware, |
|----|---|-------|
| | 6 knives, forks, spoons, pots and pans | |
| 2. | Puppets - Felt Animal Puppets - set of 6 - F.P. 600 \$ | 7.50 |
| | Constructive Playthings | |
| 3. | Rubber Hand Puppets - family 5 (white) 7D145 Child Craft | 14.50 |
| 4. | " 5 (black) 7D146 " " " | 1450 |
| 5. | Wooden Figures - set of 13 farm animals 2001 Constructive Play | 2.,00 |
| 6. | set of farm family 2002 | 2.00 |
| 7. | Dress-up Clothes (see list of free and inempensive materials) | |
| 8. | Bendable rubber family dolls (white)DB292 Creative Playthings | 8.95 |
| 9. | " (black)DB492 " " | 8.95 |



LIST OF SUPPLIERS

Alexander Steel Equipment Corp. 101 River Street Waltham, Massachusetts 01254

Bell & Howell Company Audio-Visual Products Division 7100 McCormick Road Chicago, Illinois 606**4**5

Cambosco Scientific Co. 342 Western Avenue Boston, Mass. 02135

Childcraft Equipment Co., Inc. 40 Forest Street Lexington, Mass. 02173 or 155 East 23rd St. New York, New York 10010

Community Playthings Rifton, New York

Constructive Playthings 1040 East 85 St. Kansas City, Mo. 64131

Creative Playthings, Inc. Princeton, New Jersey 08540

Cuisenaire Company of America, Inc. 12 Church St. New Rochelle, New York 10805

Economy 5 & 10 1730 Massachusetts Avenue Cambridge, Mass. 02138

EDC Workshop Store 55 Chapel Street Newton, Mass. 02160

Edmund Scientific Co. 100 Edscorp Building Barrington, New Jersey 08007

Roy S. Edwards Inc. 29 Crafts St. Newton, Mass. 02158

E.S.R., Inc. 34 Label St. Montclair, New Jersey 07042

Greene Rubber Co., Inc. 160 Second St. Cambridge, Mass. 02142 J. L. Hammet Co. Hammett Place, 195 Pearl St. Boston, Mass. 02184 OR 2393 Vauxhall Road Union, New Jersey 07083

Herder & Herder 232 Madison Ave. New York, New York 10016

LaPine Scientific Co. 375 Chestnut St. Norwood, New Jersey 07648

W. C. Long Co. P.O. Box 311 Chatsworth, Georgia

Magnamusic - Baton 6394 Delmar Boulevard St. Louis, Mo. 63130

McGraw-Hill Book Co. Webster Division Manchester Road Manchester, Missouri 63011

Milton Bradley Co. P.O. Box 1581 Springfield, Mass. 01101

Nasco Scientific Co. Fort Atkinson, Wisconsin 53538

National Products Inc. c/o Paul B. Segal 33 Bartlett Road Randolph, Mass.

Newcomb Audio Products Co. 12881 Bradley Ave. Sylmar, California 91342

Parallel Manufacturing Co. 32 East 10 St. New York, New York 10003

Parker Brothers 190 Bridge St. Salem, Mass.

SEE (Selective Educational Equipment Inc.) 3 Bridge Street Newton, Mass. 02195

SUPPLIERS (continued)

Taskmaster Ltd. 165-167 Clarendon Park Road Leicester, ENGLAND

Tri-Wall Containers, Inc. Educational Materials & Services One duPont Street Plainview, New York 11803

Tri-State Plastic Molding Co. Box 337 Henderson, Kentucky

Welch Scientific Co. 7300 North Linder Avenue Skokie, Illinois 60076

Wollensak 3M Company 3M Center St. Paul, Minnesota 55101

